

Digital Trade in Services

How can Bangladesh seize opportunities?

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However, the views of this paper are solely that of the authors and not the experts.

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Background





Background

- Innovative technology is seeping into the mechanisms of economic sectors worldwide
- Professional services are expected to be heavily disrupted by AI, data analytics, machine learning and digital platforms (World Economic Forum and Accenture, 2017).
- The World Trade Organization (WTO) indicates that trade in services has been expanding rapidly, at a faster pace than trade in goods since 2011
- Services currently account for around **three quarters of GDP** in developed economies.



Background

- If Bangladesh wants to benefit from international trade, it will have to adopt to the new trade regime in the digital age.
- Bangladesh's exports have been heavily concentrated in the textiles and garments sector.
- Strategic development and promotion of services trade are among the key approaches needed for Bangladesh to break into new markets (Kathuria and Malouche, 2016).
- Eliminating barriers to trade in services is therefore vital to ensure market openness in the digital age (Lopez-Gonzalez and Jouanjean, 2017).

Objectives





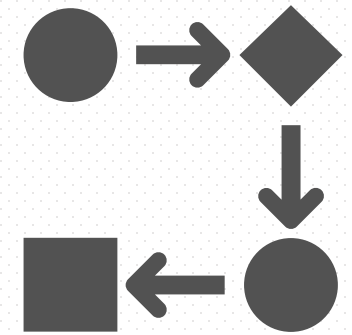
Objectives

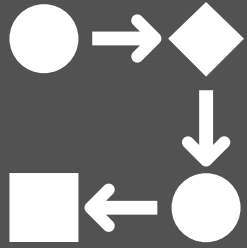
In this respect, this study has been undertaken to understand Bangladesh's prospects of international trade in services in a digital era.

Specifically, the study seeks to make the following contributions

- ① **Explore how Bangladesh can benefit from digital trade in services**
- ② **Examine what it will take for Bangladesh to adapt to the new trade regime in the digital age**
- ③ **Suggest policy recommendations to leverage benefit from digital trade in services**

Methodology





Methodology

Primary Sources

Expert Group Meeting

- ✓ Experts
- ✓ Private sector representatives
- ✓ Academics
- ✓ Other relevant stakeholders of the country

Secondary Sources

Desk Review

- ✓ Research papers and reports
- ✓ National and global policy Document

Conceptual Issues





Conceptual Issues

Digital trade and e-commerce are often used synonymously

- There is **no absolute agreement** on the definition of digital trade and what it covers among various organisations (Ismail, 2020)
- Lopez-Gonzalez and Jouanjean (2017) observed a general consensus regarding what it covers:

“digitally enabled transactions in trade in goods and services which can be either **digitally** or **physically** delivered and which involve **consumers**, **firms** and **governments**”
- This includes the purchase of goods on online marketplaces which are delivered physically, hotel-booking, and other small value services such as streamed music, e-books and online games.



Conceptual Issues

Three examples of difference in definitions where the terms “electronic” and “internet” are commonly used

India's Draft National Digital Commerce Policy

- Used the terms “e-commerce”, “electronic-commerce” and “digital economy” synonymously
- E-commerce includes “buying, selling, marketing or distribution of (i) goods, including digital products and (ii) services; through electronic network”

United States International Trade Commission (USITC)

- Defines digital trade as “the delivery of products and services over the Internet by firms in any industry sector, and of associated products such as smartphones and Internet-connected sensors”

World Trade Organization

- E-commerce, is defined as the “production, distribution, marketing, sale or delivery of goods and services by electronic means”



Conceptual Issues

Digitally Deliverable Transactions and Measuring Digital Trade

- The **digitally-deliverable services** is based on the concept of **potentially ICT-enabled services** as developed by UNCTAD in a technical note in 2015 as well as in a report of the 47th United Nations Statistical Commission in 2016
- Potentially ICT-enabled services is defined as:
 - “All cross-border transactions that are delivered **remotely over ICT networks** – i.e. over voice or data networks, including the internet, in an **electronically downloadable format**” (OECD, 2020).
- This study also employs the same definition when discussing digital trade in services



Conceptual Issues

Difficulty in measuring digital trade in services

- Biggest statistical challenge emerges due to non-monetary transactions.
- Due to intangible flows, the value of cross-border digital trade in services is likely to be underrepresented.
- Firms nowadays provide **“free” services** of use of their platforms in implicit **exchange for the data** such use generates (Ciuriak and Ptashkina, 2018).



Conceptual Issues

Difficulty in measuring digital trade in services

- Such transactions are done on a barter basis without any paper trail or receipts.
- This makes it **difficult to value the traded services** in domestic setting, and more complicating at the cross-border level.
- Furthermore, a **significant statistical challenge** concerning the measurement of Digitally Intermediated platforms (DIP) transactions concerns transactions with non-resident DIPs, especially by households (which may **lead to underestimates of trade**) (OECD, 2020).

Global and National Trend of Digital Trade in Services





Global and National Trend of Digital Trade in services

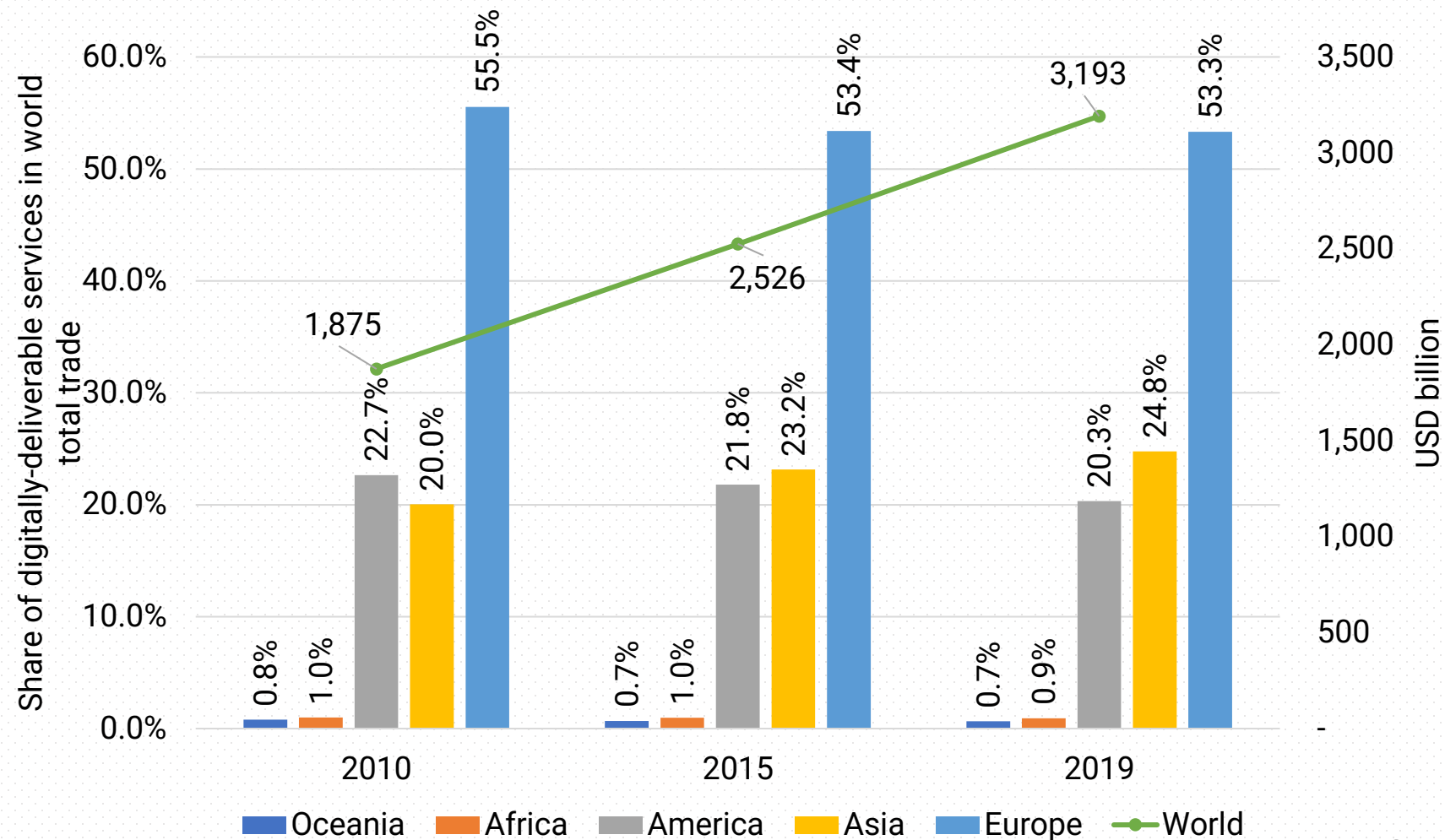
- According to WTO (2019), trade costs in services are nearly **twice** those in trade in goods.
- Digital technologies, reduced policy barriers and investment in infrastructure facilitated **costs reduction by 9% between 2000 and 2017**
- Owing to **digitalisation**, **internet access** and **low-cost connectivity**, erstwhile non-tradable businesses have become extremely tradable as they can be remotely traded across the world (Akhtar, Hahm, and Stone, 2016).
- UNCTAD estimated that global e-commerce transactions were USD 29 trillion in 2017.
- In 2016, the global digital economy was valued at USD 11.5 trillion (**15.5% of global GDP**)
 - By 2025, it is predicted to reach **24.3%**.



Global and National Trend of Digital Trade in services

At the global level, the volume of exports of digitally-deliverable services (EDDS) has **increased manifold in the last decade** where the developed regions boast a significant share.

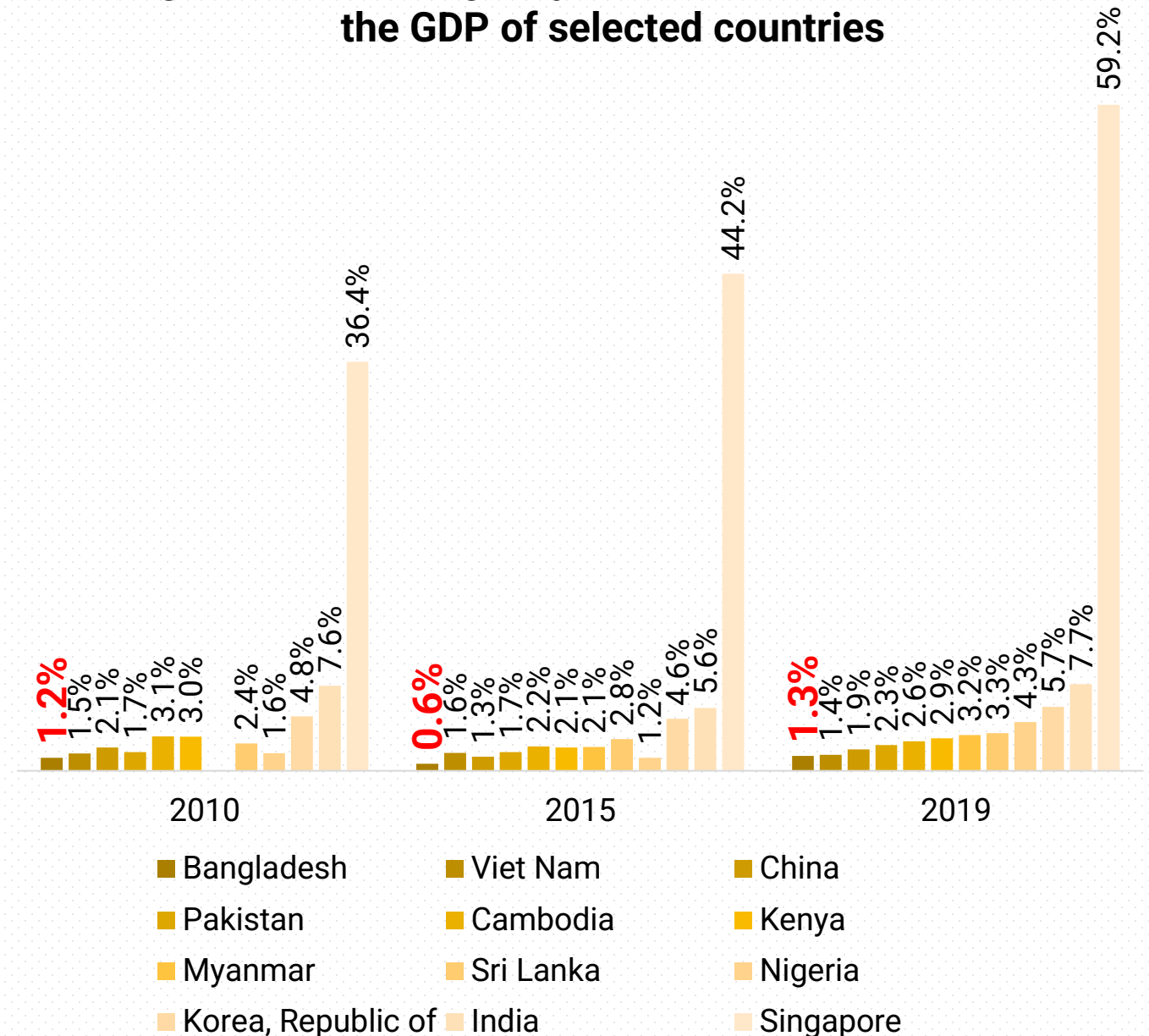
Figure: Trend in exports of digitally-deliverable services



Source: Authors' illustrations based on UNCTAD data.

- Volume of trade in DDS has increased manifold in Bangladesh
 - Trade increased eight fold from 599 million in 2005 to **USD 4,005 billion** in 2019
- Despite the progress, **Bangladesh's** trade in DDS as a **share of GDP fares much low** compared to neighbouring countries, economies with similar per-capita GDP and other developed countries (Figure)
- Compared to Cambodia, Kenya, Nigeria and Pakistan, which have roughly similar per capita GDP, Bangladesh had underperformed in terms of trade in DDS as a share of GDP in 2019
- Neighbouring **India (7.7 per cent)** and **Sri Lanka (3.3 per cent)** had featured a much larger share in their respective GDPs, which was even higher than **China (1.9 per cent)**

Figure: Share of digitally-deliverable services trade in the GDP of selected countries



Source: Authors' illustrations based on UNCTAD data.



Global and National Trend of Digital Trade in services

Emerging trends in trade in digital-services in the COVID-19

- While the pandemic situation adversely affected some service providers, it created opportunities for others.
- Due to the pandemic, many regions **lifted restrictions** imposed formerly on **telemedicine** as the benefits of safe, remote testing and monitoring have become apparent.
- **Virtual law firms** and **freelance management consultants** are increasingly providing services across **digital platforms**.
- **Education systems** across the world **have adopted online solutions** by initiating remote learning.
- Microsoft estimates an additional **149 million technology-oriented jobs** will be created during 2020-25 including **98 million software development** jobs and **23 million cloud and data roles jobs** (Smith, 2020).

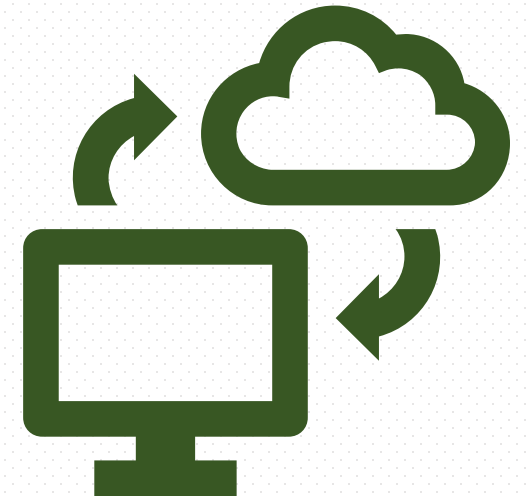


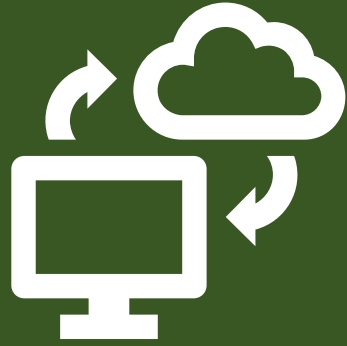
Global and National Trend of Digital Trade in services

Emerging trends in trade in digital-services in the COVID-19

- Even in Bangladesh, telemedicine service has experienced a major boost in demand from healthcare seekers.
- Aspire to Innovate (a2i) (2020) reported that that Telenor health experienced a **30% increase** in phone consultation services.
- The pandemic has also encouraged the consumers in Bangladesh to avail goods and services through online platforms.
- A2i (2020) expected additional **10,000 new jobs** in the IT and Tech companies around Bangladesh by the end of 2020 due to digitalisation of many services in response to WFH arrangements.

Digital Preparedness of Bangladesh





Digital Preparedness of Bangladesh

- A country's **digital preparedness** is reflected in the existence of **pragmatic digital policies** and **enabling environment** for digital infrastructure development.
- **Digital infrastructure** is the physical hardware and associated software that enables **end-to-end information and communication networks** to operate (ITU, 2018).
- **ICT infrastructure**, which constitutes **universal internet access, connectivity** and **affordability** and is complemented by **ICT education and skills**, is the first step towards building digital infrastructure (Banga, 2019).
- Bangladesh is still **inadequately prepared**.

Bangladesh ranks low in digitalisation and digital trade related indicators

	Bangladesh	China	Sri Lanka	Myanmar	India	Nepal	Pakistan	Bhutan
2017- ITU ICT Development Index (176 economies)	147	80	117	135	134	140	148	121
2019- UNCTAD B2C E-commerce Index (152 economies)	103	56	86	126	73	112	114	116
2020- Networked Readiness Index (134 economies)	105	-	83	-	88	113	111	-

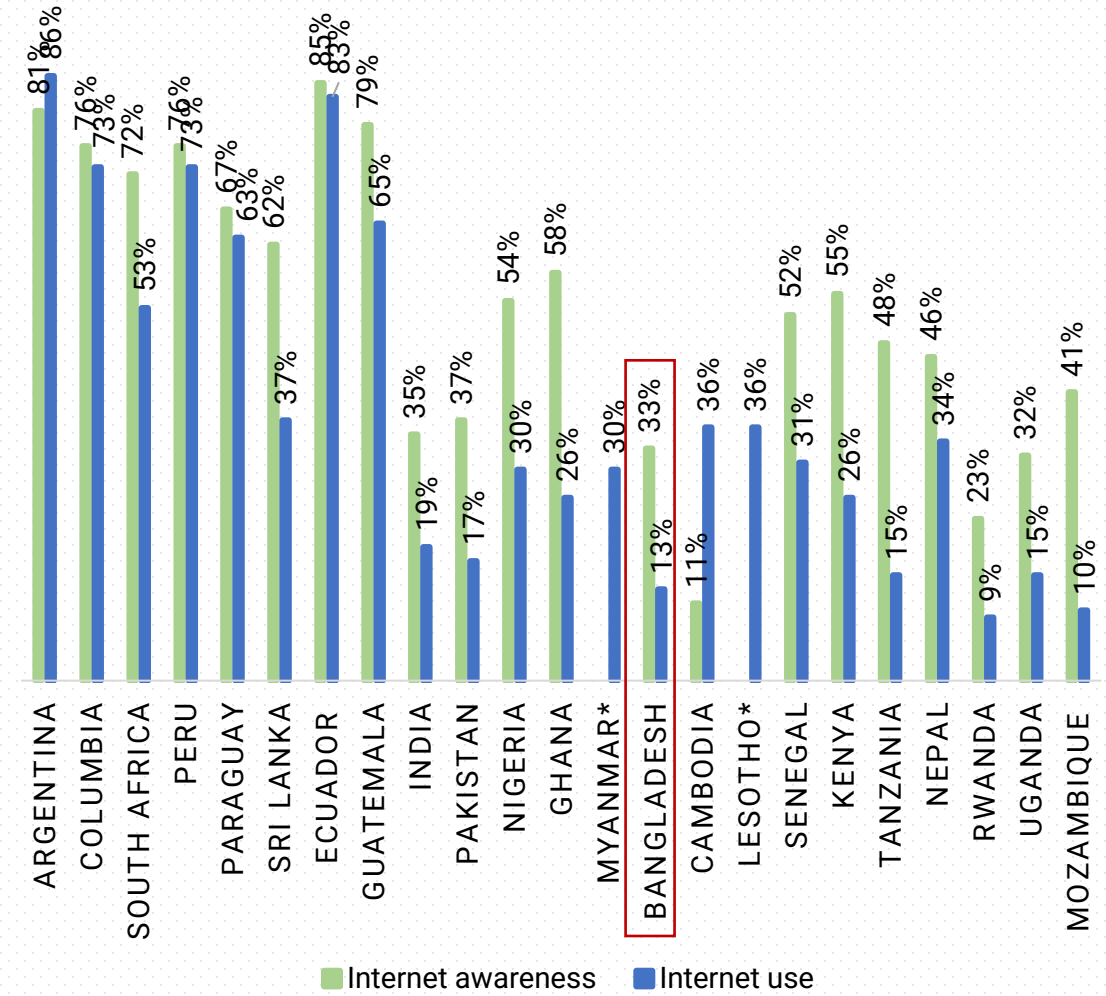
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Source: Authors' compilation based on Dutta and Lenvin (2020), ITU (2017), UNCTAD (2019)

Access to internet is limited and awareness on internet is not encouraging

- Multiple Indicator Cluster Survey (MICS) 2019 found that only **37.6%** of the households have **access to internet** on a device from home (BBS, 2019).
- LIRNEasia (2019) found **internet awareness** only among **one-third** of surveyed population aged 15-65 years in Bangladesh
 - only **13 per cent** of the same age group use internet.

Figure: Internet awareness and use (% of population aged 15-65 years)



Source: Adapted from LIRNEasia (2019)

Internet costs are high resulting in a low internet usage rate

- Cost of mobile data in Bangladesh is nearly seven times higher than that of India
- Bangladesh has the **third highest** cost of fixed-line broadband package among the **South Asian countries**
- According to Ookla (2020), Bangladesh ranked
 - **135 out of 139** countries in October 2020 for **mobile internet speed**
 - **96 out of 176** countries for **fixed line broadband internet**

Figure: Average price of 1GB mobile data in South Asia (USD)

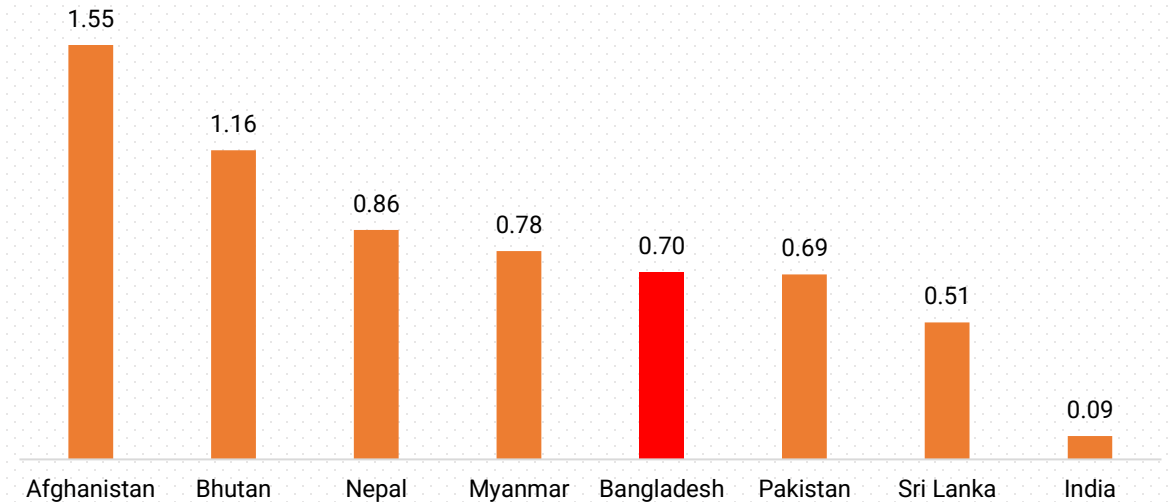
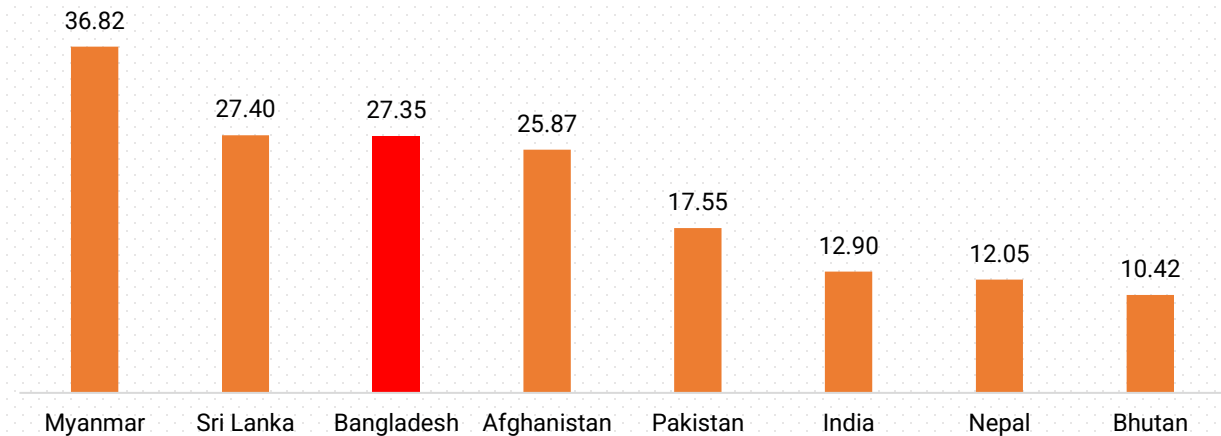





Figure: Average cost of a fixed-line broadband package in South Asia (Per month in USD)



Bangladesh has the highest gender gap among surveyed Asian countries in terms of use of mobile internet

- **52%** of women are less likely to use internet than men (GSMA, 2020)
- Bangladeshi women are **34% less likely to own a mobile phone** than men.
- Women aged 15-49 years are lagging behind in terms of connectivity and digital literacy (**Table**)
- Factors including barriers to **access**, **affordability**, **lack of education** and **technical literacy**, and **socio-cultural prejudices** and **norms** contribute to digital exclusion based on gender

Table: Bangladeshi women's digital literacy and access to digital connectivity

Indicator	Percentage
 Used a computer during the last 3 months	1.9
 Used the internet during the last 3 months	12.9
 Carried out at least one of nine specific computer related activities during the last 3 months	1.4

Source: BBS (2019)



10,000-30,000 IT students graduate every year



Bangladesh ranked 116 out of 131 economics Global Innovation Index (GII) where it ranked



World Bank estimates emigration rate of tertiary-educated population from Bangladesh is 4.3%



Bangladesh ranked 4th among Asian countries and 27th in the world in the human flight and brain drain index

ICT related skills are low

- Unemployment is high among graduates due to insufficient knowledge and a mismatch of skills
- Lack of research and development at universities deter teachers and student from adopting new knowledge landscape
- Bangladesh finds it difficult to retain its bright graduates
- Many academics and practitioners from Bangladesh stay abroad after completing higher studies



Digital Preparedness of Bangladesh

Poor business environment impedes expansion of trade in services

- Many small and medium enterprises (SMEs) and freelancers export services directly to international markets digitally
- Access to finance poses a significant challenge for entrepreneurs and freelancers involved in the ICT sector.
- A survey on 18 IT-based enterprises showed that
 - 77.6 per cent of the total initial investment made by the firms came from self-financing
 - only 2.5 per cent came from banks
- Cross-border transfers are complicated by complex financial regulations in the country
 - The Bangladesh Bank has set foreign exchange limits to deter capital flights (UNCTAD, 2019).
 - Such regulations create impediments for e-commerce firms to participate in global value chains



Digital Preparedness of Bangladesh

Policy inadequacy contributes to weak internet infrastructure in the country

- National ICT Policy of Bangladesh does not provide clear strategies for digital inclusion in terms of digital ICT access, use and skills.
- Mismatch in the interplay of policies have also contributed to poor affordability and access to internet
- International Long-Distance Telecommunication Service (ILDTS) Policy, introduced in 2007 and revised by the Ministry of Posts and Telecommunications in 2010, requires licenses for each service and prohibits foreign investments
- The ILDTS policy has led to a complicated and fragmented market framework which has raised costs for the end-users (ITU, 2018)



Digital Preparedness of Bangladesh

Policy inadequacy contributes to weak in internet infrastructure in the country (cntd.)

- Mobile operators and internet service providers are prohibited from sharing of active infrastructures including optical fibre, Radio Access Network (RAN) and others as per the amendment to “Guidelines for Infrastructure Sharing” by the Bangladesh Telecommunication Regulatory Commission (BTRC).
- At present capital cost required for active infrastructure is around 60 per cent.
- RAN sharing alone can save 30-40 per cent of the cost (Leza, 2014; Wahid-Uz-Zaman, 2015).
- This has cost implications for end users.

Recommendations and Conclusions





Recommendations and Conclusions

Address the gaps in policy to enhance digital inclusion

- ICT policies need to be revised through a bottom-up approach through the participation of the grassroots and relevant stakeholders, including technical experts.
- Secondly, the structural inefficiencies in the ILDTS policy need to be addressed.
- Various license categories need to be consolidated, and strong competition rules need to be developed (ITU, 2018).
- Market mechanism should drive infrastructures sharing mode, not through regulatory mandates (Wahid-Uz-Zaman, 2015).



Recommendations and Conclusions

Create awareness and raise skills

- Due to heterodox disciplines in the education system in Bangladesh and across the world, multiple stakeholders, including students, teachers, firms, institutions, and the government will need to work together to achieve these goals.
- There is a need for research and development as such activities can inculcate curiosity and creativity among the students.
- National Education policy needs to be reviewed from time to time to ensure that such global academic and skills demands are reflected in the policies and effectively implemented across all education institutions.



Recommendations and Conclusions

Incentivise female participation in ICT related education and employment

- Specific barriers that deters them from participating in ICT related education and employment needs to be addressed.
- Women from low-income families may be provided low-cost home internet packages.



Recommendations and Conclusions

Identify and ease financial constraints on actors involved in trade in services

- Bureaucratic red-tapes on inbound and outbound remittances and payments needs to be removed.
- Public policy should also enhance SMEs' access to capital by leveraging alternative financing.
- International donors can be leveraged to undertake joint initiatives with such institutions in providing equity and debt financing.

Thank You